



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/840,234

05/07/2004

Tsuyoshi Hirashima

2004_0680A

9681

513 7590 10/03/2007
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

YEH, EUENG NAN

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

10/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/840,234

Applicant(s)

HIRASHIMA ET AL.

Examiner

Eueng-nan Yeh

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 14, 17 and 27 is/are rejected.
- 7) ☒ Claim(s) 2-13, 15, 16, 18-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Response to Amendment

1. The following Office Action is responsive to the amendment and remarks received on July 18, 2007. Claims 1-27 remain pending. In response to the amendment, the previous drawing, specification "objections" are withdrawn.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 14, 17, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. (hereafter Yamashita) (US 5,384,601).

Regarding claims 1, Yamashita discloses:

a total color-adjusting stage (as depicted in figure 1, portion of elements 7 and 8 that performs the calculation of $(1-W) u^*$, $(1-W) v^*$, and $(1-W) L^*$ discussed in column 6, lines

Art Unit: 2624

3 to 21 stands for total color-adjusting stage) operable to perform a total color adjustment (calculation of $(1-W) u^*$, $(1-W) v^*$, and $(1-W) L^*$ discussed in column 6, lines 3 to 21) for data of an inputted color (as depicted in figure 1, the input signal is (R, G, B)) with respect to a total color to output data of a result vector of the total color adjustment ($(1-W) u^*$, $(1-W) v^*$, and $(1-W) L^*$ discussed in column 6, lines 3 to 21 will form the vector of total color after adjustment);

a specific color-adjusting stage (as depicted in figure 1, portion of elements 7 and 8 that performs the calculation of $W X u_0^*$, $W X v_0^*$, and $W X L_g^*$ discussed in column 6, lines 3 to 21 stands for specific color-adjusting stage) operable to perform a specific color adjustment (calculation of $W X u_0^*$, $W X v_0^*$, and $W X L_g^*$ discussed in column 6, lines 3 to 21) for the data of the inputted color with respect to a specific color to output data of a result vector of the specific color adjustment ($W X u_0^*$, $W X v_0^*$, and $W X L_g^*$ discussed in column 6, lines 3 to 21 will form the vector of specific color after adjustment. The special color is the color viewer preference or remembered color: "remembered colors are such things as skin color and green leaves, colors that the viewer remembers as being a certain color or that 'should' be a certain color" at column 1, line 38);

a composing unit (as depicted in figure 1, portion of units 7 and 8 that performs the addition of total color and specific color as described in equations 1a and 1b of column 6, lines 10 to 26) operable to linearly compose (the linear operator, the addition, of equations 1a and 1b of column 6, lines 10 to 26) the data of the result vector of the total

Art Unit: 2624

color adjustment output by said total color-adjusting stage and the data of the result vector of the specific color adjustment output by said specific color-adjusting stage; total color-adjusting stage and said specific color-adjusting stage are provided to operate in a parallel manner (as described in equations 1a and 1b that both total color-adjusting stage and specific color-adjusting stage are linearly combinable which means parallel processing);

when a degree that said total color-adjusting stage adjusts the data of the inputted color increases, then a degree that said specific color-adjusting stage adjusts the data of the inputted color decreases (as described in equation 1 that when $1-W$, the total color-adjustment coefficient, increases, W , the specific color-adjustment coefficient, decreases);

when a degree that said total color-adjusting stage adjusts the data of the inputted color decreases, then a degree that said specific color-adjusting stage adjusts the data of the inputted color increases (as described in equation 1 that when $1-W$, the total color-adjustment coefficient, decreases, W , the specific color-adjustment coefficient, increases);

total color-adjusting stage includes a multiplying unit (as depicted in figure 1, portion of units 7 and 8 that performs multiplication during total color-adjusting stage is the multiplying unit) operable to multiply a total color-adjusting vector by a coefficient to generate the data for the result vector of the total color adjustment (as depicted in figure 1, portion of elements 7 and 8 that performs the calculation of $(1-W) u^*$, $(1-W) v^*$, and $(1-W) L^*$ discussed in column 6, lines 3 to 21, i.e. performs multiplication during total

Art Unit: 2624

color-adjusting stage, where u^* , v^* , and L^* forms the total color-adjusting vector and $1-W$ is the total color-weighting coefficient).

Regarding claim 14, Yamashita discloses: A color-adjusting apparatus for adjusting data of an inputted color (as depicted in figure 1, the input signal is (R, G, B)) with respect to a total color (as depicted in figure 1, portion of elements 7 and 8 discussed in claim 1 stands for total color) and a plurality of specific colors (as depicted in figure 1, portion of elements 7 and 8 discussed in claim 1 stands for specific colors. The specific colors are such things as "skin color and green leaves, colors that the viewer remembers as being a certain color or that 'should' be a certain color" at column 1, line 39; "It is to be noted that the invention can also be applied in the same way to remembered colors other than skin colors" at column 3, line 4. Hence, plurality of specific colors and vectors can/will be processed. Hereon, a specific color and plurality of specific colors will be used interchangeably), said color-adjusting apparatus comprising stages corresponding to the units of the apparatus of claim 1 (see rejection of claim 1 over Yamashita above).

Regarding claim 17, Yamashita discloses the method of claim 17 comprising method steps corresponding to the units of the apparatus of claim 1 (see rejection of claim 1 over Yamashita above).

Regarding claim 27, Yamashita discloses the method of claim 27 comprising method steps corresponding to the units of the apparatus of claim 14 (see rejection of claim 14 over Yamashita above).

Allowable Subject Matter

6. Claims 2-13, 15-16, and 18-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

- a) Yamashita discloses the total color-adjustment stage and specific color-adjusting stage of claims 2, 15 and 18. However, the composing of Yamashita, while adding the result of the total color adjustment vector and the result of the specific color adjustment vector, does not also add the inputted color vector.
- b) Tsukada (U.S. 7,016,075 B1) provides a technique that adds inputted color and a result of specific color adjustment. However, Tsukada does not mention total color adjustment and there is no motivation to combine Yamashita's method with Tsukada's method.

Response to Arguments

Summary of Applicant's Remarks:

"it is apparent that Yamashita does not disclose adjusting the ~~non~~-pre-selected (specific color) terms" at response page 16, line 3. Examiner assumes that applicant is arguing for pre-selected (specific color) terms.

Examiner's Response:

Yamashita defines the specific colors as remembered colors: "as skin color and green leaves, colors that the viewer remembers as being a certain color or that 'should' be a certain color" at column 1, line 39; "It is to be noted that the invention can also be applied in the same way to remembered colors other than skin colors" at column 3, line 4.

Yamashita discloses adjusting the specific color in equation 1, where ($u0^*$, $v0^*$, Lg^*) is the specific color-adjusting vector and W is the specific color-weighting coefficient.

Summary of Applicant's Remarks:

"multiplying a total color-adjusting vector by a coefficient to generate the data of the result vector of the total color adjustment. Yamashita does not disclose or suggest such a feature" at response page 16, line 12.

Examiner's Response:

Applicant's argument is moot in view of Yamashita's equation 1, where (u^* , v^* , L^*) is the total color-adjusting vector and $1-W$ is the total color-weighting coefficient. The multiplication of total color-adjusting vector by the total color-weighting coefficient,

Art Unit: 2624

as illustrated in equation 1, will generate a result vector of the total color adjustment.

Refer to the rejections above.

Summary of Applicant's Remark:

The previous drawing and specification objections should be withdrawn in view of the amendment.

Examiner's Response:

Examiner agrees, and the previous objections are withdrawn.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2624

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eueng-nan Yeh whose telephone number is 571-270-1586. The examiner can normally be reached on Monday-Friday 8AM-4:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eueng-nan Yeh *E.Y.*
Assistant Patent Examiner
2624

/Brian P. Werner/
Supervisory Patent Examiner (SPE), Art Unit 2624